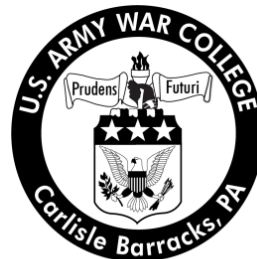


## Analysis of Army Force Generation Model Behavior and Expectation Management

by

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United States Army



United States Army War College  
Class of 2012

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**ANALYSIS OF ARMY FORCE GENERATION MODEL BEHAVIOR AND  
EXPECTATION MANAGEMENT**

by

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## **ABSTRACT**

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The 2011 Army Posture Statement posits that the benefits of the Army Force Generation (ARFORGEN) as a supply based model have yet to be realized because the high demand for war-fighting capabilities exceeded sustainable supply since its implementation.<sup>1</sup> This assertion is erroneous because it overemphasizes supply of units or capabilities over the quality of the units and/or capabilities provided, and disregards all of the institutional efforts required to produce those units and/or capabilities through the ARFORGEN model. The benefits of the ARFORGEN model have not been realized because of a lack in understanding model behavior and its limitations; expectation management practices; and basic supply and demand economic principles by those who strongly promote ARFORGEN as a supply based model. To realize, in full, the benefits of the ARFORGEN model requires the acceptance that expectations must be managed, and that the model has limitations. This acceptance of ARFORGEN as a supply based model must be instituted and espoused throughout the operating and generating force of the Army enterprise, until then, its benefits will never be realized.





## ANALYSIS OF ARMY FORCE GENERATION MODEL BEHAVIOR AND EXPECTATION MANAGEMENT

A model may be entrancing, but no matter how hard you try, you will not be able to breathe life into it. To confuse a model with theory is to believe that humans obey mathematical rules, and so to invite disaster.

—Emanuel Derman<sup>2</sup>

### Introduction

The 2011 Army Posture Statement (APS) posits that the benefits of the Army Force Generation (ARFORGEN) as a supply based model have yet to be realized because the high demand for war-fighting capabilities exceeded sustainable supply since its implementation.<sup>3</sup> This assertion is erroneous because it overemphasizes supply of units or capabilities over the quality of the units and/or capabilities provided, and disregards all of the institutional efforts required to produce those units and/or capabilities through the ARFORGEN model. Additionally, the assertion also waters down the benefits provided through the synchronization of the Army enterprise institutional efforts of recruiting, organizing, manning, equipping, training, sustaining, mobilizing, and deploying. The determination that the ARFORGEN model has either succeeded or failed is based on whether it met expectations. Random do models fail; they simply fail to meet expectations.<sup>4</sup>

As a supply based model, ARFORGEN offers several benefits that, with visionary civilian and military leadership, can provide a realm of cost effective options to meet national and global requirements, especially in a fiscally challenged environment. Maximizing the potential benefits of the ARFORGEN model requires a drastic shift in the current manner the Army resources individual Geographical Combatant Commanders (GCCs), civil authorities, and global contingency response force

requirements, but also requires a grasp of what models are, how they behave, and their limitations; the application of expectation management practices; and a basic knowledge of the principles of supply and demand economics.

### Army Force Generation Background

Officially established in 2006 by the Secretary of the Army, Honorable Francis J. Harvey, the ARFORGEN model was introduced as a rotational, progressive readiness, and transformational model.<sup>5</sup> The ARFORGEN model became the tool through which operational force units would undergo modular force transformation while meeting the demands of GCCs and civil authorities in addition to providing a sense of predictability of deployment windows for units and Soldiers alike. The predictability element was addressed through the establishment of cyclic rates (dwell-time) initially introduced in a 2003 Secretary of Defense memorandum, “One operational deployment in three years for the active component (AC), and one operational deployment in six years for the reserve component (RC).”<sup>6</sup> Army Regulation (AR) 525-29, *Military Operations: Army Force Generation* published on March 14, 2011 and effective on April 14, 2011 provided further guidance regarding unit dwell-time:

For the AA [active Army] it is the ratio of deployed periods, or boots on the ground (BOG) time, to non-deployed periods, or Dwell (BOG: Dwell) for the AC [1:3]. For the RC [Reserve Component], the ratio is measured as periods of time mobilized to periods of time not mobilized (Mobilized: Dwell)[1:5].<sup>7</sup>

The 2010 APS explained that the purpose of the ARFORGEN model is to “...provide combatant commanders (CCDR) and civil authorities with a steady supply of trained and ready units that are task organized in modular expeditionary force packages and tailored to joint mission requirements.”<sup>8</sup> Based on the preceding statement and the

guidance in AR 525-29, the ARFORGEN model has met, for the most part, the intent of a rotational, progressive readiness, predictability, and transformational model.

However, the 2011 APS describes the ARFORGEN model for the first time as a supply based model that cycles units through RESET, Train-Ready, and Available force pools (see figure 1), and it goes further in stating that “... ARFORGEN is defined as the structured progression of unit readiness over time, resulting in recurring periods of availability of trained, ready and cohesive units.”<sup>9</sup>

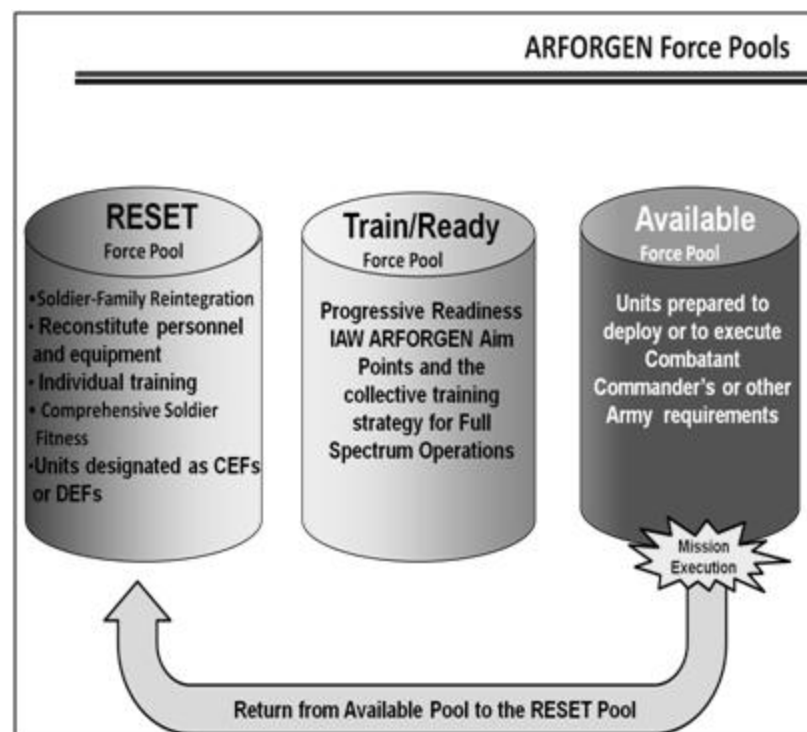


Figure 1.

The cycling of units through force pools has been a part of the ARFORGEN model since its inception in 2006, and is an attempt to synchronize and integrate the Army enterprise institutional efforts of recruiting, organizing, manning, equipping, training, sustaining, mobilizing, and deploying. The eventual goal of the ARFORGEN model is to supply fully equipped, trained, and ready Army units and capabilities from the force structure

inventory of all of its components: AC and the RC (Army National Guard (ARNG) and Army Reserve (USAR)) to meet the operational and global contingency demands of the GCCs and civil authorities. With the modular transformation of the operational force in both the AC and RC completed by 2011, the Army has begun efforts to transform and modernize the generating force structure (the institutional Army) to be more responsive to this supply based model.

### ARFORGEN Model Behavior

Is the ARFORGEN model a poor performing model or is it performing as what it is – a model? The answer to this question lies in the explanation of what models are, how they behave, and in understanding their limitations. The erroneous assertion in the 2011 APS that the ARFORGEN model has failed to reach its advertised potential, underscores the entire Army enterprise lack of understanding of model behavior similar to a typical human psychological reaction to adjusting to a new normal. According to Emanuel Derman, a noted modeling expert, explained in his book *Models Behaving Badly: Why Confusing Illusion with Reality Can Lead to Disaster, On Wall Street and in Life* that that there is a psychological reaction finds “that people who obtain something they always wanted quickly become accustomed to their new possession or status and are soon no longer satisfied with it.”<sup>10</sup>

Aside from being lauded as a rotational, progressive readiness, and transformational model in the 2010 APS; the ARFORGEN model was also accredited with providing individual Army units, Soldiers, and their families with a predictability of possible deployment. Based on the premise of predictability, the ARFORGEN model could predict when an Army unit or capability was expected to be available to the GCCs as part of a Deployable Expeditionary Force (DEF) or as part of a Contingency

Expeditionary Force (CEF). This predictability is the purpose for building models – to simplify what otherwise is complex; the future. This over simplification of the complex elements related to the ARFORGEN model to meet future operational demands is unreliable and dangerous.<sup>11</sup> The end result of understanding model behavior eventually leads to the effective management of expectations throughout the Army enterprise as it relates to the ARFORGEN model. In the context of ARFORGEN, users are defined as those who place a demand or requirement against the model; players are defined as the institutional Army entities providing a service or an input in support of the cyclic force pools within the ARFORGEN model.

### What are Models?

Emanuel Derman in his book *Models Behaving Badly: Why Confusing Illusion with Reality Can Lead to Disaster* defines a model as “a metaphor of limited applicability, not the thing itself.”<sup>12</sup> Models simply predict what the future will be like so that we may influence it.<sup>13</sup> Besides predicting potential outcomes, models offer fast and easy ways to help explain complex environments or processes so we humans can understand. Human beings are fixated with coming to an understanding of complex situations and in knowing what the future holds to make decisions easier to make. To deal with uncertainty, human beings use models to define and predict complex environments like weather, molecular science, or economics. Models are exaggerations of the truth, and according to Derman, “abstractions for a collection of an indefinite number of qualities and quantities and their interaction” with their environment.<sup>14</sup>

### How Models Behave?

Models help in understanding the whole by breaking it down into individual pieces and parts that can be manipulated and analyzed to the minute detail. As

Emanuel Derman notes, “Models project multidimensional reality into smaller more manageable spaces where regularities appear and then in that smaller space, allow us to extrapolate and interpolate from the observed to the unknown.”<sup>15</sup> This extrapolation is what brings unreliability into a model by projecting “a detailed and complex world onto a smaller subspace.”<sup>16</sup> However, with persistent practice, models can eventually master what appear to be complex tasks by making what is a conscious effort, an unconscious one, bringing with it all the fallibilities of the model.<sup>17</sup>

However, when models are faced with conflicts, the unconscious effort becomes conscious again to re-establish a new normal and unconscious effort.<sup>18</sup> Hence, the new conscious effort in this instance brings an unfamiliar element into the equation that requires further adjustment or reassessment to the elements that make a model function as intended. From time to time, models fail in meeting human expectations, but it is in the readjustment or reassessment phase that leads to eventual success of models.

### Model Limitations

As discussed in the preceding paragraphs when describing a model, the tendency is for players and users to focus on individual key components or parts at the expense of the whole; eventually becoming the definition of the whole. Much like describing a fashion model, the tendency is to describe the model by the external attributes of clothing, hair, and make-up; often overlooking the fashion model’s human attributes of morals, values, and virtues; good or bad. This extrapolated interpretation or description of a model is more critical during its implementation, leading to the realization of the limitations inherent in modeling. These limitations are risks that eventually become uncertainties that can, in some instances, be measured in some

models leading the players and users to become either optimistic or disillusioned with the entire model itself. The eventual understanding of the limitations inherent in modeling will lead players and users to the realization that the internal qualities of a model are what make it what it truly is, good or bad, and help in managing expectations on the benefits of what models can or cannot provide.

The ARFORGEN model is not perfect, but it is performing as designed. As a supply based model, it simply exaggerates individual distinctive elements of the Army enterprise institutional functions at the expense of each other. In other words, the ARFORGEN model is not the solution, but rather part of it; the entire operational and institutional Army enterprise is synchronized to maximize their efforts in producing; fully equipped, trained, and ready units or capabilities. Models are not theories; they are an over simplification of something more complex while providing a window into the future.

This oversimplification brings with it positive and negative attributes that eventually become uncertainties that, in the case of the ARFORGEN model, cannot be measured. Understanding this limitation will help players and users to manage their own expectations. Models build expectations of the future so that humans can interact with the realities of the end product. Derman further explains that models are indeed expectations, “Understand that expectations of the future are precisely a model.”<sup>19</sup> Building on the previous statement, it can be said that expectation management is modeling management.

### Expectation Management

Kirti Vaidya, Senior Director at Covansys, describes expectation management as “a formal process to continuously capture, document, and maintain the content, dependencies, and sureness of the expectations for persons participating in an

interaction, and to apply the information to make the interaction successful.”<sup>20</sup> To be successful tools, models require players and users, and the enterprise they play a part of to intensely practice expectation management to optimize the individual and the enterprise institutional efforts that generate confidence and trust. The practice of expectation management within a model seeks to communicate that the specific conditions affecting the product along a particular process or system to all participating players and users internally and externally of the enterprise to build credibility over time. Expectation management benefits a model by constantly validating and communicating (internally and externally) its management directives, including the reasons for the model, budget, schedule, and scope; including detailed requirements affecting the model.<sup>21</sup>

Expectations come in explicit and implicit forms, and are more profound and expansive than the requirements that could positively or negatively impact a model.<sup>22</sup> Explicit expectations deal with the obvious stated and documented forms that communicate to players and users the workings and assumptions employed in a process or, in this case, a model. Effective communication exposes the weaknesses and strengths within a process or a model, which is not necessarily a dreadful practice in this instance. Implicit expectations are most likely to lead to disappointment or generate claims of failure by some, if not all, players and users of a model. Vaidya explains that project failure is in the eyes of the beholder:

The determination may be highly subjective, depending on who is in charge. If a manager's charter is to ensure that a project delivers on all its scope, then a schedule slippage might not qualify as a failure. And it is likely that no one except a QA person would consider a project a failure if it delivers on all its scope on time and within budget but does not meet all quality criteria.<sup>23</sup>



The ARFORGEN model provides examples of the explicit and implicit expectations concept. Examples of explicit expectations in the ARFORGEN model are: a demand or requirement for a unit or capability; budget constraints; dwell-time ratios; equipment fielding schedules; and individual unit authorization documents' effective dates. For example, there is a stated and explicit expectation of the ARFORGEN model that the stated dwell-time for units within their specific components; 1:2 for AC or 1:4 for RC will be met. Implicit expectations are those that, somehow, escape documentation and are most likely to cause problems between players and users. An overzealous synchronization staff officer at the Headquarters Department of the Army Force Development Directorate, for example, overstates his ability to equip a unit or capability within a particular force pool cycle of the ARFORGEN model in the efforts to make himself look better in the eyes of his peers and superiors alike.<sup>24</sup> The implications of the previous example require that players and users pay close attention to indicators that pinpoint shortcomings in order to help them shape their own expectations and ensure success.<sup>25</sup>

The 2011 APS described ARFORGEN as a supply based model. As such, the supply and demand characteristics inherent within the ARFORGEN model bear significant semblance to established supply and demand economic models. Economic models are intensely managed across all aspects of the enterprise to maximize the output prediction and, in the case of ARFORGEN, the level of readiness and quality of units or capabilities produced. Supply and demand economic models are positively impacted through the use of expectation management practices, with the end result being a well coordinated output or product that meets or exceeds user expectations.

While implementing the ARFORGEN model, players and users seek to maximize their expectations along the RESET, Train, and Available force pools. The end result maximizes the individual and enterprise expectations within the ARFORGEN model leading to best value practices being employed by all players and users across the enterprise to produce a well equipped, trained and ready unit. To avoid claims of failure by either players or users of the ARFORGEN model requires the establishment of an effective expectation management process throughout the Army enterprise to maximize the benefits it is designed to provide. Expectation management is in essence ARFORGEN model management.

#### Principles of Supply and Demand

The principles of supply and demand economics are proven theory that provide the link between the complexities of ARFORGEN model management and the realities that govern similar economic models. Supply and demand economic principles provide the basis for understanding ARFORGEN model management as a whole, for it interconnects the relationships of the players and users into a cohesive expectation of when and how a unit or capability will be supplied in support of the GCCs and civilian authority requirements. In their book, *Basic Economic Principles: a Guide For Students*, David E. O'Connor and Christopher Faille define economics as “the study of how people choose to use their scarce resources in order to satisfy their nearly unlimited economic wants.”<sup>26</sup> This scarcity in resources leads people to make choices. It is the choices that people make in an economy the reason for the study of economics. O'Connor and Faille summarize further that “The term economy refers to all of the production and consumption decisions, and all activities that relate to the use of resources in an economy.”<sup>27</sup> To come to grips with supply, production, and consumption decisions,

economists use models to predict human or market interaction and behavior in an economy.

The factors supporting decision making through the ARFORGEN model are similar to what economists call the resources that are used in production or the factors of production.<sup>28</sup> Economists define four factors of production as: natural resources, human resources, capital goods, and entrepreneurship.<sup>29</sup> The ARFORGEN model has seven factors of production; doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTLMPF) with regards of capability or functional area. Factors of production are used to produce services and goods, but they must be paid for; nothing comes from nothing as the principle of the law of conservation of matter states. Army components pay for these factors of production through the efficient allocation of resources for each capability and functional area. This is where the synchronization of activities and the communication of expectations begin throughout the Army enterprise; before a unit or capability is produced or just prior to the RESET force pool cycle in the ARFORGEN model.

Further, O'Connor and Faille recap that "Supply refers to the amount of a good or service that producers are willing and able to sell at a series of prices in a given period of time."<sup>30</sup> Defined within the context of ARFORGEN model implementation, supply refers to the quantity of units and/or capabilities that Army components (AC, ARNG, and USAR) are able to provide in support of established ARFORGEN force pool cycle guidelines to address operational and contingency requirements. The law of supply can help explain this further within the ARFORGEN model to explain that there is an inverse relationship between the risks and the quantity of units or capabilities supplied. This

means that as per unit costs of producing units or capabilities decrease, the ARFORGEN model will increase the quantity supplied or vice versa.

How is demand defined? According to O'Connor and Faille "Demand is the amount of a resource, good, or service that people are willing to buy at a series of prices in a given period in time"<sup>31</sup> In terms of ARFORGEN, demand refers to the number of units and/or capabilities that users require to address operational and contingency risks according to specified strategic timelines. Following this line of thought, the law of demand explains that there is also an inverse relationship between, per unit costs of generating a unit or capability, and the quantity demanded for the unit or capability. This means that, for most units or capabilities, as the per unit costs increase, the quantity demanded decreases and adjustments are made to accommodate specific GCCs or civilian authorities' demands.

The principles behind supply and demand economics closely follow the principles of the law of conservation that matter can neither be created nor destroyed, and that it can only be changed from one form to another. Supply and demand are mirror opposites of each other, and like matter, are just different forms of the same. Henry Hazlett described that "...demand and supply are different sides of the same coin. They are the same thing looked at from different directions. Supply creates demand because at bottom it is demand."<sup>32</sup> Supply and demand economics are much like any other system; participants' efforts are reciprocated in kind in a constant search for market equilibrium.

So, how does the market equilibrium concept translate to the ARFORGEN model? Market equilibrium in the ARFORGEN model is reached when there is a

compromise between the operational requirements or demand and the forces produced or supplied with regards to the resources or fiscal costs available to produce well equipped, trained, ready, and cohesive Army units and capabilities from the force structure supply chain of the AC, ARNG, and USAR in the Army enterprise. Using the law of demand to explain how the Army enterprise supplies and produces units and/or capabilities from within its entire force structure supply chain at a reduced cost and risk, requires full consideration of the entire force structure supply chain. To maintain a steady supply of quality units and/or capabilities requires the unbiased inclusion of the entire operational and generating force structure of the AC, ARNG, and USAR as part of the Total Force concept employed to support of national and global contingency requirements.

#### Tweaking the ARFORGEN Model

The statement in the 2011 APS that the benefits of the ARFORGEN model have not yet been realized clearly indicates that both players and users throughout the Army enterprise have not properly managed expectations with regards to what the model is and its inherent limitations. Regardless, the ARFORGEN model did deliver as initially intended; it provided a rotational, progressive readiness and transformational model for units across the Army enterprise to follow. The increase of GCCs request for forces (RFF) caused units' dwell-time to be considerably reduced from what was originally intended in 2006 and per AR 525-29 guidance on the cyclic rotation of units: 1:2 for AC and 1:5 for the RC through the ARFORGEN force pools; with the ultimate goal being to provide well equipped, trained, and ready forces to meet requirements. However, dwell-time thresholds and RFF demands could not be met initially without negatively

impacting dwell-times across all Army components in the force structure supply chain; negatively impacting expectations of players and users of the ARFORGEN model.

Expectation management requires strong leadership throughout the Army enterprise force pool cycles to achieve equilibrium within the capabilities requested (demand) and the deliverables that meet the demand (supply). In his “Leadership” blog, Mike Myatt explains further that “The science of aligning expectations is about systematically connecting what is said with what is done.”<sup>33</sup> An effective expectation management process requires that clear and verifiable communication flow occurs vertically, horizontally, and diagonally across all members of the enterprise to reduce misinterpretation on the deliverables and maximize the benefits proposed by the ARFORGEN model.

As stated previously, the ARFORGEN model is behaving like any other supply based economic model. Economic models require adjustments and reassessments from time to time to ensure their viability and sustainability over the long term; the ARFORGEN model is no different. For example, adjustments are required on the supply side to meet demand side requirements, and vice versa. Supply chain adjustments can come on the form of force structure adjustments to meet capability demands; or they can come on the form of statutory adjustments that facilitate the increased use of the RC force structure to meet capability demands of the GCCs. It is the latter that poses the greater challenge, for it requires a realigning of legal statutes, policies, and budget regulations and procedures to help meet global operational requirements in light of current fiscal constraints.<sup>34</sup> Demand side adjustments require that players and users

through the Army enterprise, to include the GCCs, understand the limitations posed by supply based models, and basic supply and demand economic principles.

GCCs should understand that supply and demand based economic models like ARFORGEN, will not always meet their RFFs (demand) expectations. However, quality is better than quantity. What the ARFORGEN model will produce are well equipped, ready, and trained units and/or capabilities well suited to meet operational full spectrum requirements. GCCs must actively participate in the ARFORGEN model process to effectively manage their own expectations as to the type of capability the Army will provide them.

The economic principles of supply and demand are established and proven theories that are in constant search for equilibrium. GCCs must have a clear understanding that as the ARFORGEN model seeks to find equilibrium across the Army enterprise to meet their demands that it may not deliver the specific capability they seek. Insatiable demands for units and/or capabilities cannot be met without putting the entire system at risk. Economics is the study of how people choose to use their scant resources in order to satisfy their nearly unlimited economic wants. Players and users of the ARFORGEN model must come to the understanding that nothing is free in life and economics.

Army leaders in charge of providing force structure in support of GCCs and civil authorities' demands must take into consideration all the Army components of the Total Force supply chain through the ARFORGEN model. Taking in consideration all aspects of the entire Army force structure supply chain will ensure that a more comprehensive cost benefit package of units and/or capabilities in their Available force pool cycle is

prepared to meet GCCs' global requirements. Through the effective use and management of the ARFORGEN model, a force package of, either or both, AC and RC Available forces would provide the forward presence rotations across the all geographical commands, freeing up the Army AC forces to respond to last minute contingencies across the globe. The cost benefit packaging of forces and capabilities deployed in their Available cycle of the ARFORGEN model ensures that GCCs have forward deployed forces that are always ready to respond to any contingency. The employment of forces in these cost benefit packages should replace the current manner the Army supports global forward presence. Whereas currently, permanently forward stationed forces would go through the ARFORGEN cycles of RESET, Trained/Ready, and Available at their forward stationed locations and not be quickly available for the GCCs to respond to any national or global contingency.

The previous paragraph proposes a drastic shift in thinking that supports an even bolder move to further expand the employment of the Army RC as an operational force. This bold approach suggests the employment of Army RC forces to meet predictable GCCs requirements, while freeing the Army AC to be employed in a strategic role to meet worldwide contingencies. This bold proposal expands upon the last decade's practice of employing the ARNG as an operational reserve to provide the force structure in support of predictable requirements like in the Multinational Force and Observers to the Sinai; peacekeepers in Bosnia and Kosovo; and security forces in the Horn of Africa and Guantanamo missions. Wherever Army forces and or capabilities are required, and bound by agreements to be based at overseas locations (predictable requirements), ARNG and USAR units in the Available force pool could meet those agreements



through nine-month deployments as part of the deployable expeditionary force pool of units, leaving Army AC forces in their Available force pool as part of the contingency expeditionary force pool of units to quickly respond to scenarios requiring immediate access to Army capabilities. This will ensure that a more comprehensive cost benefit package of forces and capabilities is available to meet GCCs' global contingency requirements.

These forces would fall in on prepositioned equipment, doing away for the need of moving large quantities of equipment. Rotating brigade size forces in and out of Europe and Korea using the ARFORGEN model to provide combat ready forces required to support Chapter 5 of NATO and UN accords and any other eventuality should a crisis develop in the region. These rotational brigades will deploy to Europe and Korea for a minimum of nine months at a time in the early stages of their "Available" ARFORGEN cycle. These ready formations, part of the Contingency Expeditionary Force, will fall in on prepositioned equipment and provide the GCCs with the flexibility to quickly provide forces and respond to any crisis should it develop, at which point, the become Deployed Expeditionary Force.

### Conclusion

The benefits of the ARFORGEN model have not been realized because of a lack in understanding model behavior and its limitations; expectation management practices; and basic supply and demand economic principles by those who strongly promote ARFORGEN as a supply based model. Coming to an understanding that models, regardless whether they are economic or scientific, are metaphors is an exercise in expectation management in and of itself. The ARFORGEN model is not a panacea that will solve all of the Army's force generation ailments; as a model, it has limitations that

must be understood throughout its individual parts, and as a part of a whole.

Expectation management practices help in identifying, assessing, and quantifying expectations across the Army enterprise throughout the ARFORGEN force pool cycles. The assertion that the ARFORGEN model has failed to deliver is simply a lack of understanding on the part of the players and users of the model.

As originally envisioned in 2006, the ARFORGEN model was the tool that facilitated the modular transformation of the Army's operational force and for meeting the immediate needs of the GCCs in support of increasing requirements in support of the global war on terror. The intent was to fully implement the Total Force concept in an attempt to integrate and employ the entire operational force structure supply chain of all the components of the Army (AC, ARNG, and USAR) to meet particular operational demands in defense to the homeland and overseas. It is the unrestrained and unbiased use of the Total Force supply chain concept within the ARFORGEN model that plays an integral part of this supply based model. However, the lack of institutional acceptance of the Total Force supply chain concept throughout the Army enterprise is the other reason where the full benefits of ARFORGEN have failed to be realized.

The lack of impetus in institutionalizing the ARFORGEN model throughout the Army enterprise is concentrated on immediate returns without considering, in full, the RC elements in the supply chain, thus ignoring or belittling the long term effects of fully integrating the Total Force concept within ARFORGEN. To realize, in full, the benefits of the ARFORGEN model requires the acceptance that expectations must be managed, and that the model has limitations. This acceptance of ARFORGEN as a supply based model must be instituted and espoused throughout the operating and generating force

of the Army enterprise, until then, its benefits will never be realized. GEN George W. Casey Jr., then Chief of Staff of the Army said in June 19, 2007 that “We will not cement the transformational change of the Army until the institution reflects that change.”<sup>35</sup>

## Endnotes

<sup>1</sup> John M. McHugh and George W. Casey, *America’s Army: The Strength of the Nation at A Strategic Crossroads: A Statement on the Posture of the United States Army, Fiscal Year 2012*, Posture Statement presented to the 112th Cong., 1st sess. (Washington, DC: U.S. Department of the Army, 2011), Addendum F.

<sup>2</sup> Emanuel Derman, *Models Behaving Badly: Why Confusing Illusion with Reality Can Lead to Disaster, On Wall Street and in Life* (New York: Free Press, 2011), 198.

<sup>3</sup> John M. McHugh and George W. Casey, *America’s Army: The Strength of the Nation at A Strategic Crossroads: A Statement on the Posture of the United States Army, Fiscal Year 2012*, Posture Statement presented to the 112th Cong., 1st sess. (Washington, DC: U.S. Department of the Army, 2011), Addendum F.

<sup>4</sup> Kirti Vaidya, “Four Quadrant Expectation Management,” developerWorks, <http://www.ibm.com/developerworks/rational/library/may05/vaidya/> (accessed February 2, 2012).

<sup>5</sup> John M. McHugh and George W. Casey, Jr., *America’s Army: The Strength of the Nation at A Strategic Crossroads: A Statement on the Posture of the United States Army, Fiscal Year 2012*, Posture Statement presented to the 112th Cong., 1st sess. (Washington, DC: U.S. Department of the Army, 2011), Addendum F.

<sup>6</sup> Francis J. Harvey and Peter J. Schoomaker, *A Campaign Quality Army With Joint and Expeditionary Capabilities: A Statement on the Posture of the United States Army, Fiscal Year 2007*, Posture Statement presented to the 109th Cong., 2nd sess. (Washington, DC: U.S. Department of the Army, 2006), Addendum E.

<sup>7</sup> U.S. Department of the Army, *Army Force Generation*, Army Regulation 525-29 (Washington, DC: U.S. Department of the Army March 14, 2011), 2.

<sup>8</sup> John M. McHugh and George W. Casey, Jr., *America’s Army: The Strength of the Nation: A Statement on the Posture of the United States Army, Fiscal Year 2011*, Posture Statement presented to the 111th Cong., 2nd sess. (Washington, DC: U.S. Department of the Army, 2010), Addendum F.

<sup>9</sup> Ibid

<sup>10</sup> Emanuel Derman, *Models Behaving Badly: Why Confusing Illusion with Reality Can Lead to Disaster, On Wall Street and in Life* (New York: Free Press, 2011), 81.

<sup>11</sup> Ibid, page 54.

<sup>12</sup> Ibid, page 59.

<sup>13</sup> Ibid, page 43.

<sup>14</sup> Ibid, page 47.

<sup>15</sup> Ibid, page 58.

<sup>16</sup> Ibid, page 59.

<sup>17</sup> Ibid, page 67.

<sup>18</sup> Ibid, page 67.

<sup>19</sup> Emanuel Derman, *Models Behaving Badly: Why Confusing Illusion with Reality Can Lead to Disaster, On Wall Street and in Life* (New York: Free Press, 2011), 164.

<sup>20</sup> Kirti Vaidya, "Four Quadrant Expectation Management," developerWorks, <http://www.ibm.com/developerworks/rational/library/may05/vaidya/> (accessed February 2, 2012).

<sup>21</sup> Ibid.

<sup>22</sup> David L. Hamil, "Expectation Management: A 'Gateway Key' to Project Success-Client Satisfaction," (a 2005 Professional Development Symposium White Paper, Huntsville, AL, September 15, 2005), [http://www.northalabamapmi.org/documents/papers/2005\\_HAMIL%2005-PDS\\_WhitePaper.pdf](http://www.northalabamapmi.org/documents/papers/2005_HAMIL%2005-PDS_WhitePaper.pdf) (accessed February 3, 2012), 3.

<sup>23</sup> Ibid.

<sup>24</sup> Kirti Vaidya, "Four Quadrant Expectation Management," developerWorks, <http://www.ibm.com/developerworks/rational/library/may05/vaidya/> (accessed February 2, 2012).

<sup>25</sup> Ibid.

<sup>26</sup> David E. O'Connor and Christopher Faille, *Basic Economic Principles: a Guide For Students* (Westport, Conn.: Greenwood Press, 2000), 1.

<sup>27</sup> Ibid, page 7.

<sup>28</sup> Ibid, page 7.

<sup>29</sup> Ibid, page 63.

<sup>30</sup> David E. O'Connor and Christopher Faille, *Basic Economic Principles: a Guide For Students* (Westport, Conn.: Greenwood Press, 2000), 36.

<sup>31</sup> Ibid, page 31.

<sup>32</sup> Henry Hazlitt, *Economics in One Lesson* (New York: Three Rivers Press, 1988), 28.

<sup>33</sup> Mike Myatt, "Leadership," N2Growth, entry posted October 31, 2011, <http://www.n2growth.com/blog/leadership-expectation-gap/> (accessed February 6, 2012).

<sup>34</sup> Craig R. McKinley, "The National Guard: A Great Value Today and in the Future," (Washington, DC, March 30, 2011), <http://www.nationalguard.mil/features/valueforamerica/default.aspx> (accessed February 2, 2012), 3.

<sup>35</sup> Charles C. Campbell, *Cementing Change- Institutionalizing ARFORGEN* (Army, April 2010), 41.

